AVSIM Commercial FSX Aircraft Review

Aerospool WT-9 Dynamic

Product Information		
Publishers: Lionheart Creations		
Description: Commercial general aviation aircraft for FSX.		
Download Size: 181 MB	**Format:** Download	**Simulation Type:** FSX
Reviewed by: Mike Cameron AVSIM Staff Reviewer - July 16, 2011		

Introduction

The Aerospool WT-9 Dynamic is a two seat light sport aircraft made primarily of carbon fiber composite material. The fuselage of the plane consists of composite sandwich shells where the main construction material is carbon fiber. This ensures low weight combined with high strength and toughness. The main part of the fuselage is an 8 foot wide center section with fuel tanks with a total capacity of 19.8 US Gallons in the outer part of the stub wings on the center section. The fuselage is connected to the tail parts in a classic arrangement. The stabilizer span is the same as the center section width, which enables the transport of the aircraft with the wings removed on a trailer or in a truck.

The canopy frame is also made from carbon composite materials for strength & stiffness, with an inner cabin width of 46 inches, making the Dynamic the most spacious aircraft in the light sport aircraft category. A distortion free acrylic glass canopy provides a panoramic view over the instrument panel. The seats are set in a natural semi-reclining position with adjustable rudder pedals to accommodate up to 6 foot 5 inch pilots.

The Dynamic is one of only a few light sport aircraft that is offered in two different versions, a fixed landing gear or hydraulic retractable landing gear. The aircraft is powered by a Rotax 912 UL 80 horsepower engine with a maximum

cruise speed of 135 Knots (RG) & 120 Knots (FG), maximum operating altitude of 10,000 feet and a maximum cruise range 750 nautical miles. The Aerospool WT-9 Dynamic is one of the earliest manufactured light sport airplanes and to date more than 250 aircraft have been sold worldwide.

Installation and Documentation

I am reviewing the FSX version of the Aerospool Dynamic; a FS2004 version is also available as a separate purchase. The review product uses the Flight1 activation and installation process which requires an active internet connection. Other vendors are also selling the aircraft, so your install process may differ from what I am about to describe.

Run the setup program, agree to the license agreement, verify or browse to the correct location of your FSX program files then click next and start. After clicking the start button, installation continues and installs the aircraft onto your hard drive. This whole process from activation to installation should only take a couple of minutes.

The first time that you load the Dynamic in FSX, you will be asked to “Run” and “Accept” the gauge files as trusted software, click the Yes button and the aircraft will load. The User Manual can only be opened from the aircraft. I e-mailed Lionheart Creations to see if it would be possible to download the manual. I like to have a printed document on my lap when I am first learning a new aircraft. They responded quickly but unfortunately, only the in-plane interactive manual is included.

Interactive manual

They did explain how to print out the pages of the manual. This is accomplished by copying the LHC-WT9 cabinet file, located in the FSX Gauges folder, to the desktop then decompiling it with WinZip or another unpacking program. All of the pages will be there in Windows Bitmap format ready for printing.

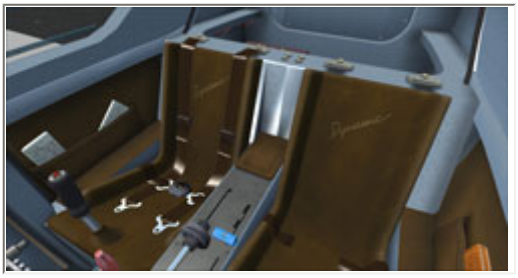
Interior Model

Lionheart Creations has done an excellent job with the interior textures. I could not find a single blurry texture. All objects, both large & small, are three dimensional looking. Everything including passenger seat belts, luggage, Emergency Locator Transmitter, maps on right side of the cockpit and signage all look great. Even the exposed wires under the panel and along the right side of the cockpit are modeled.

The interactive manual is opened by clicking on the manual on the left side of the cockpit. All of the interiors are the same for all of the aircraft. The seatbelt harness is partially missing from view on the left seat indicating that the virtual pilot is seated in the aircraft, even though they are not viewable in the virtual cockpit view. Personally, I would have preferred not to have any part of the belt showing or have an option to have the entire harness viewable when parked with engines off and parking brake on.

Another thing that I would like to see added to the interior is to have the passenger headset located somewhere in the cockpit. The headset is viewable from the spot view but not from the virtual cockpit view. There is a button on the panel that turns the plexiglass windshield on or off, which is a feature that I like because sometimes I want a clear glass windshield.

The interior has a modern and very clean appearance as you would expect from an aircraft made from carbon fiber materials. Normally I like at least one aircraft that has stains, scratches, etc., indicating an aircraft that has had some use, but with the Dynamic I do not have a problem that this has not been included.


Forward area of cockpit

Aft area of cockpit

Exterior Model

As good as the interior textures are, the exterior textures and details are outstanding. There are a total of 20 aircraft in the package with half of the aircraft being fixed gear and the other half being retractable gear models. With the FSX version, each aircraft has either a male or female pilot that is viewable from the outside views.

The exterior textures are great looking without affecting performance. The amount of detail that Lionheart Creations has included with the Dynamic is incredible. Every single nut & bolt has been modeled, including the cowling quick release screws. All exterior wording is clear and easy to read and just like the interior model, I could not find a single blurry texture. Other exterior features that make the Dynamic special include, very detailed Rotax engine when the cowling is removed, brake assemblies on the retractable gear aircraft, parking mode with wheel chocks, propeller covers, luggage sitting on the ramp, selectable wing types (with or without winglets) and selectable fuselage types (with or without rear window).

I always selected to have the real window and winglets because I liked the extra visibility and winglets are cool looking. My favorite exterior feature is the ability to show the aircraft without wings, ready for transport. The only thing missing is a viewable truck or trailer parked nearby to transport the aircraft.

The one thing that I did not like about the exterior is the mirror on the pilot side of the aircraft. This mirror is popular in Europe, but for me seems out of place on an aircraft. I am glad that Lionheart Creations has included the mirror because it is an option on the real world Dynamic and can be removed if you do not like it.

Fixed gear with male pilot

Retractable gear with female pilot

Detailed engine and propeller covers

No winglets

Parking mode with baggage on the ramp

Wings removed for transport

Panel

Unlike most flight simulator aircraft developers, Lionheart Creations has included an excellent 2D panel. I like having the 2D panel option because there are times when the ambient light in the cockpit makes it hard to see the instruments on the virtual panel. Although with most aircraft, including the Dynamic, I can limit this problem by using a combination of panel lighting and or cabin or dome lighting. The Dynamic only has dome lighting and the lighting effect is very nice.

Some highlights of the Dynamics panel include:

- Auxiliary instruments: Airspeed in kilometers per hour, Altimeter in meters & Vertical Speed Indicator in meters per second
- Master switch only – not the usual combination master & alternator switches
- Autopilot power switch and heading & altitude hold switch
- Flybox Prop Management Computer
- ELT arming switch

- Dynon D-100 Glass Panel PFD System & Dynon HS34 Controls Console
- AvMap Model EKP-IV Moving Map GPS Panel
- Garmin SL-30 Radio
- Garmin GTX-327 Multipurpose Transponder
- Emergency Ballistic Chute Lever (non-functioning)
- Flarm Perimeter Alert Instrument (non-functioning)

The User Manual says that the Flarm Perimeter Alert Instrument is a non-functioning instrument, but on my system it still indicated the presence of AI traffic. The one difference between the fixed gear and the retractable gear aircraft panel is that on the retractable gear aircraft the landing gear switch and lights has replaced the Fuel Flow Computer that is installed on the fixed gear panel.

The Fuel flow computer can still be pulled up with a popup panel keyboard shortcut. Other popup panels that can be accessed with click spots and or keyboard shortcuts include, Flybox Prop Computer, Mini Autopilot, right hand panel engine gauges, default flight simulator GPS 500, the radio stack, Dynon D-100 PFD and the AvMap EKP-IV.

All of the instrumentation is easy to read, except for the various lists on the Dynon D-100 PFD. The lettering is just too small and the only way for me to read them was to enlarge the popup version of this panel. The things that I liked about the D-100 are that it displays wind speed & direction, the Airspeed is displayed in knots and the altitude on the Altimeter is displayed in feet. Oddly the Vertical Speed readout is displayed in meters instead of feet per minute.

The biggest issue that I have with the panel is that the AvMap is not a fully functional GPS. It will display a loaded FSX flight plan on the map but will not allow you to program it. You need to bring up the default GPS 500 if you want to program a flight. Personally, I would gladly sacrifice the inclusion of the real world but minimum functionality GPS, for even a basic GPS that you can program as part of the panel instead of having to use a popup instrument. My Saitek Switch Panel works with the Dynamic which is a bonus for me.

Fixed gear 2D panel

Fixed gear virtual panel

Retractable gear 2D panel

Retractable gear virtual panel

Nice interior lighting

Sounds, Animations, and Extras

The Dynamic has some very good animation & sound effects. The Rotax engine has a much different sound then most small general aviation aircraft. It has a higher pitched sound then the other aircraft engines in my virtual hangar. It is also much quieter at idle and at low power settings.

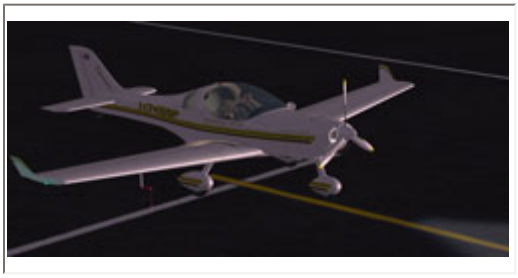
I like the fact that every switch, button and lever has an audible sound effect associated with it and can sometimes be heard over the engine sounds. My favorite sound effect is the canopy opening and closing. This is also my favorite animation. Other animations include control surfaces, retracting landing gear and the pilot head movements.

This probably should have been mentioned in the exterior section of the review, the exterior lighting is also very good, especially the landing light. Lionheart Creations has included a great feature that has been included in a couple of their other aircraft called the Command Console. With the Command Console you can open the canopy, load the FSX map and display exterior features described earlier. This is very cool because I hate having to remember keyboard shortcuts to display extra features. The canopy can also be opened from inside the cockpit by manually pushing it up into an open position, which greatly adds to the experience.

The Command Console also has a night view which is great if operating the aircraft at night. Since I am not wild about having a mirror on an aircraft and it is displayed automatically when loading the Dynamic, the first thing I do is remove the mirror using the Command Console.

Command Console

Open Canopy


Exterior lighting effects

Startup & Flight Model

Normally my default flight is the Cessna 172 parked in a cold & dark configuration; I then load the purchased aircraft. Unfortunately, this is not possible with the Dynamic because it only has a master switch instead of the more common master and alternator switches. I learned about this that hard way, shortly into my first couple of flights the transponder would turn itself off and even though the avionics appeared to stay on, they were non-functional.

I emailed Lionheart Creations on a Sunday morning and received an answer to my question that same day; I consider this outstanding customer service. What needs to be done with the Dynamic and all aircraft with only master switch is either load the Dynamic directly from the Free Flight page in FSX or load a default aircraft, start the engine (I use auto start for this procedure), load the Dynamic then shut it down to a cold & dark configuration then save this flight. Since I was going to be making several flights with this aircraft, I also saved it as the default flight. After performing this procedure, I did not have any more electrical problems.

Test System

This is a fun and very easy aircraft to fly. There are no long checklists to remember, startup is easy and there are no complicated operating procedures. After getting familiar with the aircraft with a series of short

flights, I decided to tackle cross country flight with real world weather. I departed Sanderson Field in Shelton Washington and my destination was Felts Field in Spokane Washington via the Olympia VOR, Packwood Airport and the Yakima, Moses Lake and Spokane VOR's. The suggested cruise altitude for this flight was 10,500 feet, because this aircraft really was not designed to cruise at that altitude, I deviated from the flight plan and cruised at a safe but lower altitude.

When researching this aircraft, I discovered that the Dynamic is considered fast for a Light Sport aircraft. The maximum cruise speed limit is 135 Knots, since I encountered turbulence on this trip I cruised below the rough airspeed limit of 122 Knots. Also, because this is a very light weight aircraft, winds are going to be a factor when trying to keep the aircraft on course. That being said, the Dynamic is a fun plane to fly, requires a light touch on the controls and the trim works well.

The real world Dynamic does not have an autopilot installed. Lionheart Creations has included a simple one that allows the pilot to hold altitude & heading. This is a real help on cross country flights. During this review I also completed several shorter VFR flights which are what this aircraft is perfect for.

Computer Specs

Asus G72GX Laptop
Intel Core2 Duo 2.53GHz
6GB DD2 Memory
500 GB Serial ATA HD(5400RPM)
Nvidia GeForce 260M Video Card with 1GB GDDR3 Memory
17.3" LED-Backlit LCD Screen
FSX with Acceleration
Logitech Extreme 3D Pro Joystick.
Saitek Pro Flight Switch Panel & Multi Panel
CH Throttle Quadrant

Flight Test Time:

25 hours

Summary / Closing Remarks

The Lionheart Creations Aerospool WT-9 Dynamic is a wonderful little aircraft. They have taken the time to create an accurate reproduction of the real aircraft. Textures, sound effects and animations are all excellent.

The Dynamic is a perfect aircraft for practicing flight procedures and taking short VFR flights in good weather. If you like PDF documentation that you can print, you are out of luck, but I have explained how to access the pages of the manual if you still want a printed copy.

If you only use the FSX Flight Planner, then you should not have any issues with the included AvMap GPS. Also pilots who like 2D panels will be happy because Lionheart Creations has included a very good 2D panel with the Dynamic.

What I Like About The Aerospool WT-9 Dynamic

- 2D panel included
- Command Console
- Great looking interior & exterior textures
- Wonderful sound effects
- Canopy opening & closing animation
- Easy aircraft to startup and operate
- Outstanding customer support

What I Don't Like About The Aerospool WT-9 Dynamic

- No PDF documentation
- Cannot program AvMap GPS

Printing

If you wish to print this review or read it offline at your leisure, right click on the link below, and select "save as"

Aerospool WT-9 Dynamic

(adobe acrobat required)

Comments?

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